CLAIMS

What is Claimed is:

1.

A method comprising:

selectively hashing a first data string;

digitally signing a second data string; and

generating an encryption key based on the digitally signed second data string and a third data string.

- 2. The method as recited in Claim 1, further comprising: selectively encrypting data using the encryption key.
- 3. The method as recited in Claim 2, wherein the data includes the hash of the first data string.
- The method as recited in Claim 2, wherein the data includes the first 4. data string.
 - 5. The method as recited in Claim 4, further comprising: storing the encrypted data, the second data string and the third data string.
- The method as recited in Claim 5, wherein the encrypted data, the 6. second data string and the third data string are each stored in memory.
- 7. The method as recited in Claim 5, wherein the encrypted data, the second data string and the third data string are each stored on a storage medium.

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- 8. The method as recited in Claim 1, wherein generating at least a portion of the encryption key further includes cryptographically hashing at least a portion of the digitally signed second data string combined with at least a portion of the third data string.
- 9. The method as recited in Claim 8, wherein generating the encryption key further includes cryptographically hashing the digitally signed second data string concatenated with the third data string.
- 10. The method as recited in Claim 8, wherein generating the encryption key further includes cryptographically hashing the third data string concatenated with the digitally signed second data string.
- 11. The method as recited in Claim 1, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.
- 12. The method as recited in Claim 1, wherein the first data string, the second data string and the third data string are each generated by a first device that is configured to selectively hash the first data string and generate the encryption key.
- 13. The method as recited in Claim 1, wherein a second device digitally signs the second data string.

- 14. The method as recited in Claim 13, wherein the second device includes a signature-generating device.
- 15. The method as recited in Claim 14, wherein the signature-generating device is a smart card.
- 16. A computer-readable medium having computer-executable instructions for performing steps comprising:

selectively hashing a first data string;

digitally signing a second data string; and

generating an encryption key based on the digitally signed second data string and a third data string.

17. The computer-readable medium as recited in Claim 16, further comprising computer-executable instructions for:

selectively encrypting data using the encryption key.

- 18. The computer-readable medium as recited in Claim 17, wherein the data includes the hash of the first data string.
- 19. The computer-readable medium as recited in Claim 17, wherein the data includes the first data string.

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20. The computer-readable medium as recited in Claim 19, further comprising computer-executable instructions for:

storing the encrypted data, the second data string and the third data string.

- 21. The computer-readable medium as recited in Claim 20, wherein the encrypted data, the second data string and the third data string are each stored in memory.
- 22. The computer-readable medium as recited in Claim 20, wherein the encrypted data, the second data string and the third data string are each stored on a storage medium.
- 23. The computer-readable medium as recited in Claim 16, wherein generating at least a portion of the encryption key further includes cryptographically hashing at least a portion of the digitally signed second data string combined with at least a portion of the third data string.
- 24. The computer-readable medium as recited in Claim 23, wherein generating the encryption key further includes cryptographically hashing the digitally signed second data string concatenated with the third data string.
- 25. The computer-readable medium as recited in Claim 23, wherein generating the encryption key further includes cryptographically hashing the third data string concatenated with the digitally signed second data string.

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- 26. The computer-readable medium as recited in Claim 16, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.
- 27. The computer-readable medium as recited in Claim 16, wherein the first data string, the second data string and the third data string are each generated by a first device that is configured to selectively hash the first data string and generate the encryption key.
- 28. The computer-readable medium as recited in Claim 16, wherein a second device digitally signs the second data string.
- 29. The computer-readable medium as recited in Claim 28, wherein the second device includes a signature-generating device.
- 30. The computer-readable medium as recited in Claim 29, wherein the signature-generating device is a smart card.

31. An arrangement comprising:

first logic configured to selectively hash a first data string;

second logic operatively coupled to the first logic and configured to digitally sign a second data string; and

wherein the first logic is further configured to generate an encryption key based on the digitally signed second data string and a third data string.

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- 32. The arrangement as recited in Claim 31, wherein the first logic is further configured to selectively encrypt data using the encryption key.
- 33. The arrangement as recited in Claim 32, wherein the data includes the hash of the first data string.
- 34. The arrangement as recited in Claim 32, wherein the data includes the first data string.
- 35. The arrangement as recited in Claim 34, wherein the first logic is further configured to store the encrypted data, the second data string and the third data string.
- 36. The arrangement as recited in Claim 35, further including memory operatively coupled to the first logic, and wherein the first logic stores the encrypted data, the second data string and the third data string are in the memory.
- 37. The arrangement as recited in Claim 35, further including a data storage device having at least one storage medium, the data storage device being operatively coupled to the first logic, and wherein the first logic provides the encrypted data, the second data string and the third data string to the storage device for storage on a storage medium.

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- 38. The arrangement as recited in Claim 31, wherein the first logic is further configured to cryptographically hash at least a portion of the digitally signed second data string combined with at least a portion of the third data string.
- 39. The arrangement as recited in Claim 38, wherein the first logic is further configured to cryptographically hash the digitally signed second data string concatenated with the third data string.
- 40. The arrangement as recited in Claim 38, wherein the first logic is further configured to cryptographically hash the third data string concatenated with the digitally signed second data string.
- 41. The arrangement as recited in Claim 31, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.
- 42. The arrangement as recited in Claim 31, wherein the first data string, the second data string and the third data string are each generated by the first logic.
- 43. The arrangement as recited in Claim 31, wherein the second logic is provided within a smart card.
 - 44. A method comprising: accessing a plurality of stored data strings; digitally signing a second data string; and

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generating an encryption key based on the digitally signed second data string and a third data string.

- 45. The method as recited in Claim 44, further comprising: accessing encrypted data; and decrypting the encrypted data using the encryption key.
- 46. The method as recited in Claim 45, wherein the resulting decrypted data includes a first data string.
- 47. The method as recited in Claim 46, wherein the resulting decrypted data includes a hash of the first data string.
- 48. The method as recited in Claim 45, wherein accessing the plurality of stored data strings and accessing the encrypted data further includes reading a memory.
- 49. The method as recited in Claim 45, wherein accessing the plurality of stored data strings and accessing the encrypted data further includes reading data from at least one storage medium.
- 50. The method as recited in Claim 44, wherein generating at least a portion of the encryption key further includes cryptographically hashing at least a portion of the digitally signed second data string combined with at least a portion of the third data string.

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- 51. The method as recited in Claim 50, wherein generating the encryption key further includes cryptographically hashing the digitally signed second data string concatenated with the third data string.
- 52. The method as recited in Claim 50, wherein generating the encryption key further includes cryptographically hashing the third data string concatenated with the digitally signed second data string.
- 53. The method as recited in Claim 44, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.
- 54. The method as recited in Claim 44, wherein the first data string, the third data string, and the encrypted data are each accessed by a first device that is configured to selectively hash the first data string and generate the encryption key.
- 55. The method as recited in Claim 44, wherein a second device digitally signs the second data string.
- 56. The method as recited in Claim 55, wherein the second device includes a signature-generating device.
- 57. The method as recited in Claim 56, wherein the signature-generating device is a smart card.

58. A computer-readable medium having computer-executable instructions for performing steps comprising:

accessing a plurality of stored data strings;

digitally signing a second data string; and

generating an encryption key based on the digitally signed second data string and a third data string.

59. The computer-readable medium as recited in Claim 58, further comprising computer-readable medium having computer-executable instructions for:

accessing encrypted data; and decrypting the encrypted data using the encryption key.

- 60. The computer-readable medium as recited in Claim 59, wherein the resulting decrypted data includes a first data string.
- 61. The computer-readable medium as recited in Claim 60, wherein the resulting decrypted data includes a hash of the first data string.
- 62. The computer-readable medium as recited in Claim 59, wherein accessing the plurality of stored data strings and accessing the encrypted data further includes reading a memory.

- 63. The computer-readable medium as recited in Claim 59, wherein accessing the plurality of stored data strings and accessing the encrypted data further includes reading data from at least one storage medium.
- 64. The computer-readable medium as recited in Claim 58, wherein generating at least a portion of the encryption key further includes cryptographically hashing at least a portion of the digitally signed second data string combined with at least a portion of the third data string.
- 65. The computer-readable medium as recited in Claim 64, wherein generating the encryption key further includes cryptographically hashing the digitally signed second data string concatenated with the third data string.
- 66. The computer-readable medium as recited in Claim 64, wherein generating the encryption key further includes cryptographically hashing the third data string concatenated with the digitally signed second data string.
- 67. The computer-readable medium as recited in Claim 58, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.

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- 68. The computer-readable medium as recited in Claim 58, wherein the first data string, the third data string, and the encrypted data are each accessed by a first device that is configured to selectively hash the first data string and generate the encryption key.
- 69. The computer-readable medium as recited in Claim 58, wherein a second device digitally signs the second data string.
- 70. The computer-readable medium as recited in Claim 69, wherein the second device includes a signature-generating device.
- 71. The computer-readable medium as recited in Claim 70, wherein the signature-generating device is a smart card.
 - 72. An arrangement comprising:

first logic configured to access a plurality of stored data strings;

second logic cooperatively coupled to the first logic and configured to digitally sign a second data string; and

wherein the first logic is further configured to generate an encryption key based on the digitally signed second data string and a third data string.

73. The arrangement as recited in Claim 72, wherein the first logic is further configured to:

access encrypted data; and

decrypt the encrypted data using the encryption key.

- 74. The arrangement as recited in Claim 73, wherein the resulting decrypted data includes a first data string.
- 75. The arrangement as recited in Claim 74, wherein the resulting decrypted data includes a hash of the first data string.
- 76. The arrangement as recited in Claim 73, further comprising memory operatively coupled to the first logic, and wherein the first logic reads the plurality of stored data strings and the encrypted data from the memory.
- 77. The arrangement as recited in Claim 73, further comprising a data storage device having at least one storage medium, and wherein the first logic reads the plurality of stored data strings and the encrypted data from the storage medium.
- 78. The arrangement as recited in Claim 72, wherein the first logic is further configured to generate at least a portion of the encryption key by cryptographically hashing at least a portion of the digitally signed second data string combined with at least a portion of the third data string.
- 79. The arrangement as recited in Claim 78, wherein the first logic is further configured to generate the encryption key by cryptographically hashing the digitally signed second data string concatenated with the third data string.

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- 80. The arrangement as recited in Claim 78, wherein the first logic is further configured to generate the encryption key by cryptographically hashing the third data string concatenated with the digitally signed second data string.
- 81. The arrangement as recited in Claim 72, wherein at least one data string selected from among the first data string, the second data string and the third data string includes a substantially randomly generated data string.
- 82. The arrangement as recited in Claim 72, wherein the second logic is provided within a smart card.

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